

# **Guideline for the installation and operation of Continuous Emission Monitoring Systems (CEMS) and their use for reporting under the provisions of**

## **O.Reg. 194/05 Industry Emissions – Nitrogen Oxides and Sulphur Dioxide**

**PIBs 5170e**

## **1. INTRODUCTION**

This Guideline is issued for the purpose of providing guidance in respect to the selection, installation, commissioning and operation of continuous emission monitors required by the provisions of O.Reg. 194/05.

All the matters addressed in this document are general in nature and the recommendations given herein should not be construed as providing specific directions for any particular continuous emission monitoring (CEM) system. Each installation is site specific. No particular brands of equipment are endorsed.

This document may be reviewed and modified periodically as warranted by modifications to O.Reg. 194/05 or developments in the field of continuous emission monitoring.

## **2. DEFINITIONS**

In this Guideline,

“continuous emission monitoring system” means the equipment and programs required to analyze one or several specific compounds in the gaseous effluent emissions of a discharge unit, quantify the amount of specific compounds emitted per unit time, and process the information for reporting these emissions in the manner prescribed by O.Reg. 194/05.

“Director” means the Director of the Environmental Monitoring and Reporting Branch of the Ministry of the Environment;

"facility" includes all buildings, equipment, structure and stationary items, such as surfaces and storage piles, that,

- (a) are located on a single site, or
- (b) are located on two or more contiguous or adjacent sites that function as a single integrated site;

“predictive emission monitoring system (PEM)” means any system able to predict the concentration and emission rate of a contaminant based on correlation(s) with other monitored parameters;

“site” means a property and includes nearby properties owned or leased by the same person where passage from one property to another involves crossing, but not travelling along, a public highway;

“smog period” means the period from May 1 to September 30.

### **3. APPLICATION**

The recommendations of this Guideline apply only with respect to facilities that are required to monitor nitrogen oxides and/or sulphur dioxide using a continuous emission monitor, which are covered by the provisions of Section 46 of O.Reg. 194/05.

### **4. NOTIFICATION**

Notifications or reports required to be submitted to the Director under the monitoring and reporting provisions of O. Reg. 194/05 can be sent to:

Director  
Environmental Monitoring and Reporting Branch  
Ministry of the Environment  
West Wing  
125 Resources Rd  
Etobicoke, ON M9P 3V6

### **5. REPORTING**

In addition to the annual evaluation that is required to be submitted to the Director under O.Reg 194/05 46 (7), the following reports are to be prepared and retained on site for a minimum of five (5) years:

- The date and results of the quarterly performance evaluations, including CEM system availability, performed in accordance with the provisions of Section 6.2 and 6.6 of 1/PG/7;
- The date and results of the semi-annual performance evaluations, including CEM system availability, performed in accordance with the provisions of Section 6.3 of 1/PG/7.